## 4ABSTRACT

A system and method of dynamically controlling a reservation of resources within a cluster environment to maximize a response time are disclosed. The method embodiment of the invention comprises receiving from a requestor a request for a reservation of resources in the cluster environment, reserving a first group of resources, evaluating resources within the cluster environment to determine if the response time can be improved and if the response time can be improved, then canceling the reservation for the first group of resources and reserving a second group of resources to process the request at the improved response time.